

# UC Merced

## Proceedings of the Annual Meeting of the Cognitive Science Society

### Title

How Gesture Impacts Preschoolers' Recall and Inference for Narrative Stories

### Permalink

<https://escholarship.org/uc/item/6x485973>

### Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 47(0)

### Authors

Brown, Chelsea

Colunga, Eliana

### Publication Date

2025

### Copyright Information

This work is made available under the terms of a Creative Commons Attribution License, available at <https://creativecommons.org/licenses/by/4.0/>

Peer reviewed

# How Gesture Impacts Preschoolers' Recall and Inference for Narrative Stories

**Chelsea Brown**

CU Boulder, Boulder, Colorado, United States

**Eliana Colunga**

University of Colorado Boulder, Boulder, Colorado, United States

## Abstract

Gestures are a ubiquitous part of communication, however, their exact role in communication is not fully understood. Previous work has found that producing or viewing gestures with speech can be beneficial for both the speaker and listener in various learning and comprehension tasks, though it is unclear how gestures are assisting. This study uses a narrative comprehension task to look at the impact of viewing gestures both for recall and inference making for preschoolers, with the expectation that seeing gestures increases their abilities for both tasks. Results show that children who saw gestures remembered significantly more for the gesture connected questions. There were no significant differences in inference scores, however, children's responses provide rich insight into their mental representation. Including gestures during narration can help the listener to form mental representations that converge in form, but only when the gestures are relevant to what the children may be picturing.